NAVAL POSTGRADUATE SCHOOL Monterey, California

Department of Electrical & Computer Engineering

April 1996

The Master of Science in Engineering Science (with a Major in Electrical Engineering) Degree Program

Purpose: The Department of Electrical and Computer Engineering of the Naval Postgraduate School offers a program leading to the degree Master of Science in Engineering Science with a major in Electrical Engineering [MSES(EE)]. The goal of the MSES(EE) program is to provide the academic background and training to prepare the student to analyze characteristics of electronic systems as applied to military applications.

Eligibility: All students of the Naval Postgraduate School are required to be military officers or government employees sponsored by an element of the US Government. Employees of the Naval Postgraduate School are also eligible to pursue degrees on a part-time basis with the approval of their supervisor and the department chairmen.

Applications: Students in residence at NPS apply through their curriculum officer. Those applying from outside NPS should contact the Director of Admissions, Code 62, for application procedures.

Degree Requirements: In order to fulfill the requirements of the MSES(EE) degree, a student must meet the following requirements:

- 1. Credits: Complete a minimum of 52 quarter credit hours of graduate level work. Of these 52 quarter credit hours,
 - (a) a minimum of 36 quarter credit hours of graduate level course work must be taken.
 - (b) at least 20 quarter credit hours must be in graded EC graduate courses, and, at a minimum, an additional 12 quarter credit hours in engineering, mathematics, physical science, and/or computer science must be taken.
 - (c) at least 12 quarter credit hours must be in the sequence of advanced courses (4000–4999).
 - (d) at least 16 quarter credit hours of thesis must be taken.
- 2. Option: Complete all the courses required in at least one of the ECE graduate speciality options. Currently, there are eight option areas: Communication Systems; Computer Systems; Electromagnetic Systems; Power Systems; Guidance, Navigation, and Control Systems; Joint Services Electronic Warfare; Signal Processing Systems; and Signals Intelligence. Additional information about the required courses of each option is available on the "Checklist for MSES (EE)".
- 3. Thesis: Submit an acceptable thesis (see next section).

Thesis Requirement: Although the thesis research need not necessarily represent a contribution to fundamental knowledge, it must demonstrate the student's ability to identify and solve an engineering science problem accepted as in the area of electrical and computer engineering and to report work in a document of acceptable literary quality. This appropriateness of the topic is determined by the advisor, second reader, and Department Chairman. An ECE faculty member must serve as either advisor or co-advisor. Approval of the thesis topic and scope of the thesis is obtained through the preparation and approval of a Thesis Approval Form (available in the curricula offices or the ECE department office). At the conclusion of the research work and thesis preparation, the student must present an oral summary of the project and its results to the faculty and interested students at a department seminar or other public forum.

Program Approval: For help in setting up a program or in answering any questions, see the ECE faculty liaison to the Combat Systems program. After establishing a valid program with the help of the ECE faculty liaison, the program must receive the signed approval of the Chairman of the Department of Electrical and Computer Engineering.